



Research A Commit



Charges

1. Review reports and recommendations from 2008 NCSS Regional Conferences.
2. Identify, document, prioritize, and address the critical research and development issues within the NCSS.
3. Identify opportunities for partnering on priority research needs.
4. Identify opportunities for funding priority research needs.
5. Update progress on activities related to past committee recommendations:
 - a) **Benchmark Soils and Landscapes in Soil Survey.**
 - b) **Gypsum and Expanding Salts in Western States.**
 - c) **NCSS Publications (Open File Publications).**
6. Report activities of the Committee at the National NCSS Conference.

Charge 1

Review reports from 2008 Regional Conferences

Recurring themes

- Cooperation between MLRA SSOs and university faculty
- Use of Benchmark Soils to address research priorities
- Priority research needs
 - Soil change (DSP)
 - New technology for inventory and evaluation
 - Hydropedology
 - Ecological Site Descriptions and ecosystem services

Charge 2

Identify, document, prioritize, and address the critical research and development issues within the NCSS.

Group research priorities to better identify scope and purpose

- Short-term priorities
- Global priorities
- Application of soil survey data

Needs to be highly visible

- Posted to web site

Short-Term Priorities

Soil change

Technology

Ecological site descriptions

Gypseous soils

Subaqueous soils

Landscape soil water
relationships (hydropedology)

Global Priorities

Soil change

Scaling/extrapolation

Landscape-scale carbon processes and accounting

Integration of SOC and landuse

Adaptation and mitigation strategies for climate change

Soil function

Soil and ecosystem services

- Sustainability
- Resistance
- Resilience

Application of Soil Survey Data

Relevant data to meet user needs

Decision support tools

Data validation

Landscape soil water
relationships (hydropedology)

Urban/suburban interpretations

Charge 4

Identify opportunities for funding priority research needs.

The NRCS Soil Survey Division has committed funds to fund research projects.

The Soil Survey Laboratory is available for analytical support of NCSS proposals and projects

Cooperation on soil survey related proposals to funding agencies, e.g. AFRI, NSF, NASA, DOE, EPA,

Charge 5

Update progress on activities related to past committee recommendations:

Benchmark Soils and Landscapes in Soil Survey.

- The NCSS Standards Committee evaluating criteria
- National NCSS soil characterization database

Gypsum and Expanding Salts in Western States.

- Status report of the Gypsum Task Force is available

NCSS Publications (Open File Publications).

- The Soil Survey Investigations Report (SSIR) series is proposed as a publication outlet
 - Protocols are under development
 - Available to cooperators
 - Multilevel

Subaqueous soils

Other Items

Draft NCSS document describing soil contribution to ecosystem services – Andrews and West

Increase coordination between Research Agenda and New Technology committees

- Joint forum
- Joint discussion periods
- Minimize overlapping sessions

Continually active committee

Establish advisory groups for specific applications

- Spectroscopy
- Hydropedology measurements
- Remote sensing